

LISTING OF CLAIMS:

1 1. (Currently amended) A sensor ~~ID~~identification registration method of registering
2 an ~~ID~~identification of ~~ana~~ a plurality of air pressure sensors mounted on ~~each of~~ respective tires of
3 a vehicle in a memory in a state where a position of the tire is identifiable, ~~with~~ said air pressure
4 sensor being equipped with a reception function and a plurality of transmitters being provided on
5 a body of said vehicle, each of said transmitters being made to ~~place~~ encompass only one of the
6 tires in its transmission area, said method comprising:

7 a transmission step in which one of said plurality of transmitters provided on said
8 vehicle body transmits an identification transmission request to one of said air pressure sensors,
9 the one of said air pressure sensors existing in the transmission area corresponding to one of the
10 transmitters and including transmission/reception means for transmission of an identification of
11 the one of said air pressure sensors, and the one of said air pressure sensors transmits its own
12 ~~ID~~identification in response to an ~~ID~~identification transmission request transmitted from one of
13 said transmitters;

14 a reception step in which a receiver of said vehicle body receives said
15 ~~ID~~identification transmitted from the one of said air pressure sensors in said transmission step;
16 and

17 a registration step in which said ~~ID~~identification received in said reception step is
18 registered in said memory while specifying the tire position in relation to said transmitter which
19 has transmitted said ~~ID~~identification transmission request.

1 2. (Currently amended) A sensor ~~ID~~identification registration method of registering
2 an ~~ID~~identification of ~~ana~~ a plurality of air pressure sensors mounted on ~~each of~~ respective tires of
3 a vehicle in a memory in a state where a position of the tire is identifiable, with said air pressure
4 sensor being equipped with a reception function, said method comprising:

5 a transmission step in which one of a plurality of transmitters disposed on doors of said
6 vehicle for smart control transmits an identification transmission request to one of said air
7 pressure sensors, the one of said air pressure sensors existing in the transmission area
8 corresponding to one of the transmitters and including transmission/reception means for
9 transmission of an identification of the one of said air pressure sensors, and the one of said air

10 pressure sensors transmits its own identification in response to said identification transmission
11 request transmitted from the one of said transmitters~~an ID transmission request is transmitted~~
12 ~~from one of transmitters placed on doors of said vehicle for smart control so that one of said air~~
13 ~~pressure sensors transmits its own ID;~~

14 a reception step in which a receiver of a body of said vehicle receives said
15 IDidentification transmitted from the one of said air pressure sensors in said transmission step;
16 and

17 a registration step in which said IDidentification received in said reception step is
18 registered in said memory while specifying the tire position in relation to said transmitter which
19 has transmitted said IDidentification transmission request.

1 3. (Currently amended) The method according to claim 1, wherein each of said
2 steps is repeatedly implemented while said transmitters are rotated to transmit said
3 IDidentification transmission requests in turn so that said IDidentifications related to all said tires
4 are registered in said memory.

1 4. (Currently amended) The method according to claim 2, wherein each of said
2 steps is repeatedly implemented while said transmitters are rotated to transmit said
3 IDidentification transmission requests in turn so that said IDidentifications related to all said tires
4 are registered in said memory.

1 5. (Currently amended) The method according to claim 1, wherein said
2 IDidentifications of said air pressure sensors of the tires of his/her own vehicle are registered in
3 said memory in advance and said IDidentification received from said air pressure sensor in
4 response to said IDidentification transmission request is collated with the registration contents in
5 said memory to confirm that the received IDidentification pertains to said air pressure sensor of
6 the tire of his/her own vehicle and, after the confirmation thereof, the IDidentification
7 registration is made to specify the tire position.

1 6. (Currently amended) The method according to claim 2, wherein said
2 IDidentifications of said air pressure sensors of the tires of his/her own vehicle are registered in
3 said memory in advance and said IDidentification received from said air pressure sensor in

4 response to said ~~ID~~identification transmission request is collated with the registration contents in
5 said memory to confirm that the received ~~ID~~identification pertains to said air pressure sensor of
6 the tire of his/her own vehicle and, after the confirmation thereof, the ~~ID~~identification
7 registration is made to specify the tire position.

1 7. (Currently amended) The method according to claim 1, wherein said air pressure
2 sensor is made to transmit its own ~~ID~~identification in a manner that involves identifying a reply
3 made with respect to said ~~ID~~identification transmission request.

1 8. (Currently amended) The method according to claim 2, wherein said air pressure
2 sensor is made to transmit its own ~~ID~~identification in a manner that involves identifying a reply
3 made with respect to said ~~ID~~identification transmission request.

1 9. (Currently amended) The method according to claim 1, wherein, when an
2 ~~ID~~identification is already registered in said memory in the form of specifying the tire position,
3 the ~~ID~~identification registration is made by overwriting the already registered information.

1 10. (Currently amended) The method according to claim 2, wherein, when an
2 ~~ID~~identification is already registered in said memory in the form of specifying the tire position,
3 the ~~ID~~identification registration is made by overwriting the already registered information.

1 11. (Original) The method according to claim 1, wherein each of said steps is
2 implemented in response to a predetermined trigger.

1 12. (Original) The method according to claim 2, wherein each of said steps is
2 implemented in response to a predetermined trigger.

1 13. (Original) The method according to claim 1, wherein each of said steps is
2 implemented when an ignition switch of said vehicle shows a variation in state.

1 14. (Original) The method according to claim 2, wherein each of said steps is
2 implemented when an ignition switch of said vehicle shows a variation in state.

1 15. (Currently amended) A tire air pressure sensor ~~ID~~identification registration
2 system which is made to register an ~~ID~~identification of ~~a~~ a plurality of an air pressure sensors
3 mounted on ~~each of~~ respective tires of a vehicle in a memory in a state where a position of the tire
4 is identifiable, with said air pressure sensor being equipped with a reception function, said
5 system comprising:

6 a plurality of transmitters provided in a body of said vehicle, each of said transmitters
7 being made to ~~place~~ encompass only one of the tires in its transmission area, and one of said
8 transmitters being put into operation by transmitter operating means for transmitting an
9 identification transmission request to the one of said air pressure sensors, the one of said air
10 pressure sensors existing in the transmission area corresponding to one of the transmitters for
11 transmission of an identification of the one of said air pressure sensors;

12 transmission/reception means provided in the one of said air pressure sensors for
13 transmitting said identification of the one of said air pressure sensors in response to said
14 identification transmission request transmitted from the one of said transmitters;

15 a receiver provided in said vehicle body for receiving said ~~ID~~identification transmitted
16 from the one of said air pressure sensors;

17 ~~transmitter operating means for making one of said transmitters transmit an ID~~
18 ~~transmission request;~~ and

19 ~~ID~~identification registration means for registering said ~~ID~~identification received by said
20 receiver in said memory while specifying the tire position on the basis of the relationship with
21 said transmitter put into operation by said transmitter operating means.

1 16. (Currently amended) A tire air pressure sensor ~~ID~~identification registration
2 system which is made to register an ~~ID~~identification of ~~ana~~ a plurality of air pressure sensors
3 mounted on ~~each of~~ respective tires of a vehicle in a memory in a state where a position of the
4 tire is identifiable, with said air pressure sensor being equipped with a reception function, said
5 system comprising:

6 transmitters for smart control provided on doors of said vehicle, each of said transmitters
7 being made to encompass only one of the tires in its transmission area, and one of said
8 transmitters being put into operation by transmitter operating means for transmitting an
9 identification transmission request to the one of said air pressure sensors, the one of said air

pressure sensors existing in the transmission area corresponding to one of the transmitters for transmission of an identification of the one of said air pressure sensors;

transmission/reception means provided in the one of said air pressure sensors for transmitting said identification of the one of said air pressure sensors in response to said identification transmission request transmitted from the one of said transmitters;

a receiver provided in a body of said vehicle for receiving said IDidentification transmitted from one of said air pressure sensors;

transmitter operating means for making one of said transmitters transmit an IDidentification transmission request; and

IDidentification registration means for registering said IDidentification received by said receiver in said memory while specifying the tire position on the basis of the relationship with said transmitter put into operation by said transmitter operating means.

17. (Currently amended) The system according to claim 15, wherein said transmitter operating means is constructed as means for, when the IDidentification registration for one air pressure sensor in said IDidentification registration means reaches completion, making the next transmitter transmit an IDidentification transmission request, and said IDidentification registration means is constructed as means for implementing the IDidentification registration whenever said transmitter operating means is put into activation.

18. (Currently amended) The system according to claim 16, wherein said transmitter operating means is constructed as means for, when the IDidentification registration for one air pressure sensor in said IDidentification registration means reaches completion, making the next transmitter transmit an IDidentification transmission request, and said IDidentification registration means is constructed as means for implementing the IDidentification registration whenever said transmitter operating means is put into activation.

19. (Currently amended) The system according to claim 15, wherein said IDidentifications of said air pressure sensors of the tires of his/her own vehicle are registered in said memory in advance, and said system further comprises IDidentification collation means for collating said IDidentification received from said air pressure sensor in response to said IDidentification transmission request with the registration contents in said memory to confirm

6 that the received IDidentification is an IDidentification of an air pressure sensor of a tire of
7 his/her own vehicle, and said IDidentification registration means implements the IDidentification
8 registration when said IDidentification collation means confirms that the received
9 IDidentification is the air pressure sensor IDidentification of the tire of his/her own vehicle.

1 20. (Currently amended) The system according to claim 16, wherein said
2 IDidentifications of said air pressure sensors of the tires of his/her own vehicle are registered in
3 said memory in advance, and said system further comprises IDidentification collation means for
4 collating said IDidentification received from said air pressure sensor in response to said
5 IDidentification transmission request with the registration contents in said memory to confirm
6 that the received IDidentification is an IDidentification of an air pressure sensor of a tire of
7 his/her own vehicle, and said IDidentification registration means implements the IDidentification
8 registration when said IDidentification collation means confirms that the received
9 IDidentification is the air pressure sensor IDidentification of the tire of his/her own vehicle.

1 21. (Currently amended) The system according to claim 15, wherein said air pressure
2 sensor includes registration IDidentification transmission means for transmitting its own
3 IDidentification in a manner that involves identifying a reply made with respect to an
4 IDidentification transmission request.

1 22. (Currently amended) The system according to claim 16, wherein said air pressure
2 sensor includes registration IDidentification transmission means for transmitting its own
3 IDidentification in a manner that involves identifying a reply made with respect to an
4 IDidentification transmission request.

1 23. (Currently amended) The system according to claim 15, wherein, when an
2 IDidentification is already registered in said memory in the form of specifying the tire position,
3 the IDidentification registration is made by overwriting the already registered information.

1 24. (Currently amended) The system according to claim 16, wherein, when an
2 IDidentification is already registered in said memory in the form of specifying the tire position,
3 the IDidentification registration is made by overwriting the already registered information.

1 25. (Original) The system according to claim 15, wherein said transmitter operating
2 means is put into activation in response to a predetermined trigger.

1 26. (Original) The system according to claim 16, wherein said transmitter operating
2 means is put into activation in response to a predetermined trigger.

1 27. (Original) The system according to claim 15, wherein said transmitter operating
2 means is put into activation when an ignition switch shows a variation in state.

1 28. (Original) The system according to claim 16, wherein said transmitter operating
2 means is put into activation when an ignition switch shows a variation in state.

1 29. (Currently amended) A tire air pressure monitoring system comprising:
2 air pressure sensors each provided on ~~each of~~ respective tires of a vehicle for transmitting
3 its own ~~ID~~identification together with air pressure detection data;
4 a memory for registering said ~~ID~~identification of each of said air pressure sensors while
5 specifying a position of each of the tires;
6 a receiver provided in a body of said vehicle for receiving said air pressure detection data
7 and said ~~ID~~identification transmitted from said air pressure sensor; and
8 a control unit for collating said ~~ID~~identification received together with said air pressure
9 detection data with the registration contents in said memory to specify said air pressure sensor of
10 his/her own vehicle the received air pressure detection data pertains to and, when detecting a tire
11 which shows abnormality in air pressure, making an alarm indication on the specified tire, with
12 said air pressure sensors being equipped with a reception function, said monitoring system
13 comprising:
14 a plurality of transmitters provided in said vehicle body, each of said transmitters being
15 made to ~~place-encompass~~ only one of the tires in its transmission area, one of said transmitters
16 being put into operation by transmitter operating means for transmitting an identification
17 transmission request to the one of said air pressure sensors, the one of said air pressure sensors
18 existing in the transmission area corresponding to one of the transmitters for transmission of an
19 identification of the one of said air pressure sensors;

transmission/reception means provided in the one of said air pressure sensors for transmitting said identification of the one of said air pressure sensors in response to said identification transmission request transmitted from the one of said transmitters;

~~transmitter operating means for making one of said transmitters transmit an ID transmission request; and~~

~~ID~~identification registration means for registering said ~~ID~~identification received by said receiver in said memory while specifying the tire position on the basis of the relationship with said transmitter put into activation by said transmitter operating means.

30. (Currently amended) A tire air pressure monitoring system comprising:
air pressure sensors each provided on ~~each of~~respective tires of a vehicle for transmitting its own ~~ID~~identification together with air pressure detection data;
a memory for registering said ~~ID~~identification of each of said air pressure sensors while specifying a position of each of the tires;
a receiver provided in a body of said vehicle for receiving said air pressure detection data and said ~~ID~~identification transmitted from said air pressure sensor; and
a control unit for collating said ~~ID~~identification received together with said air pressure detection data with the registration contents in said memory to specify said air pressure sensor of his/her own vehicle the received air pressure detection data pertains to and, when detecting a tire which shows abnormality in air pressure, making an alarm indication on the specified tire, with said air pressure sensors being equipped with a reception function, said monitoring system comprising:

transmitters for smart control provided on doors of said vehicle, one of said transmitters being put into operation by transmitter operating means for transmitting an identification transmission request to the one of said air pressure sensors, the one of said air pressures sensors existing in the transmission area corresponding to one of the transmitters for transmission of an identification of the one of said air pressure sensors;

transmission/reception means provided in the one of said air pressure sensors for transmitting said identification of the one of said air pressure sensors in response to said identification transmission request transmitted from the one of said transmitters;

~~transmitter operating means for making one of said transmitters transmit an ID transmission request; and~~

24 IDidentification registration means for registering said IDidentification received by said
25 receiver in said memory while specifying the tire position on the basis of the relationship with
26 said transmitter put into activation by said transmitter operating means.

1 31. (Currently amended) The system according to claim 30, wherein said transmitter
2 operating means includes operation command outputting means for outputting a predetermined
3 command designating a transmitter to be operated with respect to a smart control system for
4 controlling said transmitter, and said transmitter operating means is constructed as means for
5 making the transmission of said IDidentification transmission request by outputting said
6 predetermined command to said smart control system through the use of the operation command
7 outputting means.

1 32. (Currently amended) The system according to claim 29, wherein said transmitter
2 operating means is constructed as means for, when the IDidentification registration for one air
3 pressure sensor in said IDidentification registration means reaches completion, making the next
4 transmitter transmit an IDidentification transmission request, and said IDidentification
5 registration means is constructed as means for implementing the IDidentification registration
6 whenever said transmitter operating means is put into activation.

1 33. (Currently amended) The system according to claim 30, wherein said transmitter
2 operating means is constructed as means for, when the IDidentification registration for one air
3 pressure sensor in said IDidentification registration means reaches completion, making the next
4 transmitter transmit an IDidentification transmission request, and said IDidentification
5 registration means is constructed as means for implementing the IDidentification registration
6 whenever said transmitter operating means is put into activation.

1 34. (Currently amended) The system according to claim 29, wherein said
2 IDidentifications of said air pressure sensors of the tires of his/her own vehicle are registered in
3 said memory in advance, and said system further comprises IDidentification collation means for
4 collating said IDidentification received from said air pressure sensor in response to said
5 IDidentification transmission request with the registration contents in said memory to confirm
6 that the received IDidentification is an IDidentification of an air pressure sensor of a tire of

7 his/her own vehicle, and said identification registration means implements the identification
8 registration when said identification collation means confirms that the received
9 identification is the air pressure sensor identification of the tire of his/her own vehicle.

1 35. (Currently amended) The system according to claim 30, wherein said
2 identifications of said air pressure sensors of the tires of his/her own vehicle are registered in
3 said memory in advance, and said system further comprises identification collation means for
4 collating said identification received from said air pressure sensor in response to said
5 identification transmission request with the registration contents in said memory to confirm
6 that the received identification is an identification of an air pressure sensor of a tire of
7 his/her own vehicle, and said identification registration means implements the identification
8 registration when said identification collation means confirms that the received
9 identification is the air pressure sensor identification of the tire of his/her own vehicle.

1 36. (Currently amended) The system according to claim 29, wherein said air pressure
2 sensor includes registration identification transmission means for transmitting its own
3 identification in a manner that involves identifying a reply made with respect to an
4 identification transmission request.

1 37. (Currently amended) The system according to claim 30, wherein said air pressure
2 sensor includes registration identification transmission means for transmitting its own
3 identification in a manner that involves identifying a reply made with respect to an
4 identification transmission request.

1 38. (Currently amended) The system according to claim 29, wherein said
2 identification registration means is constructed as means for, when an identification is
3 already registered in the memory in the form of specifying the tire position, making the
4 identification registration by overwriting the already registered information.

1 39. (Currently amended) The system according to claim 30, wherein said
2 identification registration means is constructed as means for, when an identification is

3 already registered in the memory in the form of specifying the tire position, making the
4 ~~ID~~identification registration by overwriting the already registered information.

1 40. (Original) The system according to claim 29, wherein said transmitter operating
2 means is put into activation in response to a predetermined trigger.

1 41. (Original) The system according to claim 30, wherein said transmitter operating
2 means is put into activation in response to a predetermined trigger.

1 42. (Original) The system according to claim 29, wherein said transmitter operating
2 means is put into activation when an ignition switch shows a variation in state.

1 43. (Original) The system according to claim 30, wherein said transmitter operating
2 means is put into activation when an ignition switch shows a variation in state.

1 44. (Currently amended) A tire air pressure sensor having a function to transmit
2 detection data on an air pressure of a tire, detected through the use of a pressure sensor, together
3 with its own ~~ID~~identification, said sensor comprising:

4 reception means disposed in a transmission area of one of a plurality of
5 transmitters, for receiving an identification transmission request signal from one of said
6 transmitters; and

7 ~~ID~~identification transmission means for, when said reception means receives a
8 ~~predetermined ID~~said identification transmission request signal, transmitting said
9 ~~ID~~identification of said sensor in a manner that involves identifying so that the transmission of
10 said identification is identifiable as a reply to said ~~ID~~identification transmission request signal.

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1 45. (Canceled)